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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/731,116	12/10/2003	Toshihiko Kaku	4243-0106P	4657
2292 7590 06/14/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER CHU, RANDOLPH I	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 06/14/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/731,116	Applicant(s) KAKU, TOSHIHIKO	
	Examiner Randolph Chu	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/10/2003, 4/22/2004, 7/2/2004 and 7/31/2006.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,7,8 and 14-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Sannoh et al. (US 2003/0071908).

With respect to claim 1, Sannoh et al. teaches, an image acquisition section that acquires image data representing an image (Fig 1);

a correction section that detects a particular eye-related defect in the image represented by the image data acquired by the image acquisition section and corrects the detected defect (Fig 20; para. [0186]); and

an image display section that displays the number of positions at which the defect has been detected by the correction section, together with the image including the positions (Fig 6B).

With respect to claim 7, Sannoh et al. teaches that correction section detects red-eye portions in the image and corrects the detected red-eye portions (Fig 20; para. [0186]).

With respect to claim 8, please refer to rejection for claim 1.

With respect to claim 14, please refer to rejection for claim 7.

With respect to claim 15, please refer to rejection for claim 1.

With respect to claim 16, please refer to rejection for claim 1.

With respect to claim 17, Sannoh et al. teaches an image pickup section that forms a photographed object image by light of the photographed object sent via a photographing optical system onto a solid-state image pickup element (CCD) to acquire image data representing the photographed object (Fig 2.);

a photographing condition acquisition section that acquires photographing conditions in photographing an object to be photographed (fig. 3, 7, 10, and 11; para. [0253]);

a presumption section that makes a presumption on whether or not a particular eye-related defect is to occur in the photographed object image represented by the image data acquired by the image pickup section, based on the photographing conditions acquired by the photographing condition acquisition section (Face detection, para. [0297]).

With respect to claim 18, Sannoh et al. teaches a flash emitting section that emits a flash in synchronization with photographing performed by the image pickup section; and a control section that controls emission performed by the flash emitting section based on the result of the presumption by the presumption section (para. [0297]).

With respect to claim 19, Sannoh et al. teaches a correction section that detects the particular eye-related defect in the photographed object image and corrects the detected defect when it is presumed by the presumption section that the defect is to occur (para. [0297]).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Karasawa (US 2002/0051225).

Sannoh et al. teach all the limitations of claim 1 as applied above from which claim 4 respectively depend.

Sannoh et al. does not teach expressly that prioritizes the positions at which the defect has been found based on a predetermined criteria, and , displays in preference a

position to which a higher priority.

Karasawa teaches prioritizes the positions at which the defect has been found based on a predetermined criteria and displays in preference a position to which a higher priority (para [0022]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to display preference a position to which a higher priority in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that defect with higher priority can display and correct with higher priority than other defects.

Therefore, it would have been obvious to combine Karasawa with Sannoh et al. to obtain the invention as specified in claim 2.

5. Claim 3 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Robertson et al. (US patent 5,245,421).

Sannoh et al. teaches all the limitations of claim 1 as applied above from which claim 3 respectively depend.

Sannoh et al. does not teach expressly that display section, when displaying the image, displays a list of the positions.

Robertson et al. teaches that display section, when displaying the image, displays a list of the positions (co. 7 line 63 –col. 8 line 5).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to display list of the positions for the defect in image in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that user can easily identifies all the defect with list of the position.

Therefore, it would have been obvious to combine Robertson et al. with Sannoh et al. to obtain the invention as specified in claim 3.

6. Claims 4 and 5 are rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Sato et al. (US Patent 6,977,676).

Sannoh et al. teaches all the limitations of claim 1 as applied above from which claims 4 and 5 respectively depend.

Sannoh et al. does not teach expressly that zooms at least one of the positions and displaying the image, and displays a normal image in which none of the positions is zoomed and a zoomed image in which at least one of the positions is zoomed.

Sato et al. teaches zooms at least one of the positions and displaying the image, and displays a normal image in which none of the positions is zoomed and a zoomed image in which at least one of the positions is zoomed (Fig 2 and 9; col. 2 line 54 – col. 2 line 21).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to zoom the position of the defect and display it in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that user can easily identify the defect in detail with zoomed image.

Therefore, it would have been obvious to combine Sato et al. with Sannoh et al. to obtain the invention as specified in claims 4 and 5.

7. Claim 6 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of White et al. (US Patent 7,035,462).

Sannoh et al. teaches all the limitations of claim 1 as applied above from which claim 6 respectively depend.

Sannoh et al. does not teach expressly that a confirmation section that receives an operation for confirming the positions in the image displayed by the image display section, at which the defect has been detected by the correction section, wherein the image display section, when displaying the number of the positions, displays the number of the positions minus the number of positions confirmed by the confirmation section.

White et al. teaches a confirmation section that receives an operation for confirming the positions in the image displayed by the image display section, at which the defect has been detected by the correction section (Fig. 6 Accept button) , wherein the image display section, when displaying the number of the positions, displays the number of the positions minus the number of positions confirmed by the confirmation section (number of eye color defect) (col. 10 line 53 – col. 11 line 4).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to offer confirmation for the user and display number of defect to correct in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that it will allow user to choose whether correct defect or not and notify user how many defect to be corrected.

Therefore, it would have been obvious to combine White et al. with Sannoh et al. to obtain the invention as specified in claim 6.

With respect to claim 9, please refer to rejection for claim 2.

With respect to claim 10, please refer to rejection for claim 3.

With respect to claim 11, please refer to rejection for claim 4.

8. Claim 12 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Fushiki et al. (US Patent 7,065,249).

Sannoh et al. teaches all the limitations of claim 8 as applied above from which claim 12 respectively depend.

Sannoh et al. does not teach expressly that a correction cancellation section that restores the defect corrected by the correction section, in the corrected image displayed by the image display section, to the original condition held before the defect is corrected by the correction section.

Fushiki et al. teaches a correction cancellation section that restores the defect corrected by the correction section, in the corrected image displayed by the image display section, to the original condition held before the defect is corrected by the correction section (col. 10 lines 36-52).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to cancel the defect correction in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that it will allow user to reverse changes to the image.

Therefore, it would have been obvious to combine Fushiki et al. with Sannoh et al. to obtain the invention as specified in claim 12.

9. Claim 13 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Murray et al. (US 2002/0109854).

Sannoh et al. teaches all the limitations of claim 8 as applied above from which claim 13 respectively depend.

Sannoh et al. does not teach expressly that image display section, when displaying the corrected image, emphasizes the defect corrected by the correction section.

Murray et al. teaches that image display section, when displaying the corrected image, emphasizes the defect corrected by the correction section (para. [0035]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to emphasizes the defect corrected by the correction section in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that image improvement can highlighted so to be easily detectable by an operator.

Therefore, it would have been obvious to combine Murray et al. with Sannoh et al. to obtain the invention as specified in claim 13.

10. Claim 20 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Ray et al. (US 2005/0264658).

Sannoh et al. teaches all the limitations of claim 17 as applied above from which claim 20 respectively depend.

Sannoh et al. does not teach expressly that a warning section that issues a warning indicating that the defect is to occur when it is presumed by the presumption section that the defect is to occur.

Ray et al. teaches a warning section that issues a warning indicating that the defect is to occur when it is presumed by the presumption section that the defect is to occur (para. [0043]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to warn the user when the defect is needed to correct by the correction section in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that user can be notified when image improvement is needed.

Therefore, it would have been obvious to combine Ray et al. with Sannoh et al. to obtain the invention as specified in claim 20.

11. Claim 21 is rejected under 35 USC 103(a) as being unpatentable over Sannoh et al. (US 2003/0071908) in view of Kinjo et al. (US 2003/0068084).

Sannoh et al. teaches all the limitations of claim 17 as applied above from which claim 21 respectively depend.

Sannoh et al. does not teach expressly that a flash emitting section that emits a flash, wherein the image pickup section acquires first image data by avoiding the flash emitted by the flash emitting section and acquires second image data in synchronization with the flash emitted by the flash emitting section, and wherein the presumption section comprises a defect detection section that compares colors in a first image represented by the first image data and colors in a second image represented by the second image data and considers the defect to have occurred at positions where the colors are different to the degree equal to or exceeding a predetermined level.

Kinjo et al. teaches a flash emitting section that emits a flash, wherein the image pickup section acquires first image data by avoiding the flash emitted by the flash emitting section (figure 13, reference image) and acquires second image data in synchronization with the flash emitted by the flash emitting section (figure 13, red-eye image), and wherein the presumption section comprises a defect detection section that compares colors in a first image represented by the first image data and colors in a second image represented by the second image data and considers the defect to have occurred at positions where the colors are different to the degree equal to or exceeding a predetermined level (para. [170-176]).

At the time of the invention it would have been obvious to a person of ordinary skill in the art to compare images with flash emission and without flash emission in the apparatus of Sannoh et al.

The suggestion/motivation for doing so would have been that user can determine how natural corrected image is by comparing image with and without flash emission.

Therefore, it would have been obvious to combine Kinjo et al. with Sannoh et al. to obtain the invention as specified in claim 21.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randolph Chu whose telephone number is 571-270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

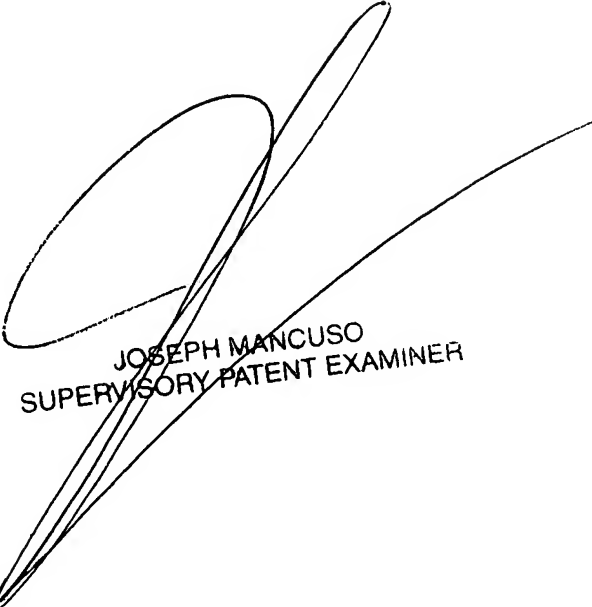
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on 571-272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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RIC/



JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER